

State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Fish

AWC Volume SE SC SW W AR IN USGS Quad Nunivak Island B-4

Anadromous Water Catalog Number of Waterway 10450

Name of Waterway Mekoryuk River USGS name X Local name

Addition X Deletion Correction Backup Information X

For Office Use

Nomination # <u>94 390</u>	<u>[Signature]</u>	<u>11/7/94</u>
Revision Year: <u>94</u>	Regional Supervisor	Date
Revision to: Atlas <u>X</u> Catalog <u> </u>	<u>Ed Wein</u>	<u>12/22/93</u>
Both <u> </u>		
Revision Code: <u>NIA</u>	Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Migration	Anadromous
sockeye salmon	25 August 1993			X	X

Provide any clarifying information, including number of fish observed, location of fish survey data, etc. Attach a copy of the fish survey data, if available. Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls.

Comments:

SPECIES ADDITION. See ATTACHED REPORT.

ALASKA DEPT. OF FISH & GAME
DEC 20 1993
REGION II HABITAT AND RESTORATION DIVISION

Name of Observer (please print) Pete Velsko
Date: Signature: [Signature]
Address: Box # 1148
NOME, ALASKA 99762

Signature of Area Biologist: R. Kim Francisco

Rev. 12/91

Tuesday, August 25

The rain stopped but still very windy; no way to make it to Nash Harbor today. Spent most of day talking to the villagers hoping to get as much information about the area fishery as possible. Hard to get accurate information, particularly about streams on the northern half of the island. This is probably due to the fact that most villagers spend their summers at fish camps on the south side of the island. At any rate it became obvious that we were too late for chum salmon which it seems begin to run in late June, early July. Spawning probably takes place during mid to latter half of July give or take a week or so (similar to Nome area). Late afternoon we decide to motor up the Mekoryuk River and have a look. Rained on and off. The river is relatively flat with very little gradient and saltwater influence extending up river a few miles or so. Test fished using a gillnet and captured several pinks, one coho and one sockeye. Took both genetic and pathology samples of the coho. Coho run seems to be in full swing. Counted seven dead spawned out chums.

Wednesday, August 26

Travel conditions looked promising, seas have subsided although it's overcast and rainy. Abe decided we should attempt Nash Harbor again and so we set out at around 10:00 AM. The further we travelled the calmer the ocean became. It looked like we were going to make it. However, about half way there the prop gave out again. With only a very damaged back up spare prop we opted to turn around and head back. Made it Mekoryuk and after some discussion decided to attempt a day trip to the Daparkmiut River about a hour's boat ride way. The Daparkmiut River was one of three rivers Tom Kron and I investigated in February 1992 that looked promising for fisheries enhancement opportunities. Trip went OK but weather was rainy and windy. Anchored the boat on a outgoing tide in the mouth of the river and hiked approximately 2 hours (3 miles?) to a spring Tom and I had looked at last winter. We conducted some site evaluation work such as checking gradient (1.3 ft. in 48 ft.), water temperature 3.0 degrees C. (same as in February), pH 7.5 and dissolved oxygen at 15 ppm. The spring runs perpendicular to the main river and originates approximately 100 yards or so from the river. The site appears to be well protected and looks favorable for installation of instream incubation boxes. Before leaving we placed a 90 day Ryan thermograph at the spring and took a water sample which will be sent to the limnology laboratory for analysis. Hiked back to the boat and waited until the tide was high enough to leave. Because of our concern for the motor, Abe proceeded very slowly back to Mekoryuk which took a few hours. Wind again picked up causing us more then a few anxious moments as we limped back.

MEMORANDUM**STATE OF ALASKA**
Department of Fish and Game

To: Bill Hauser
Regional Biologist
FRED Division, Anchorage

Date: September 4, 1992

Phone: 443-3768

From: Pete Velsko
NW Alaska Fisheries
Rehabilitation Coordinator
FRED Division, Nome

Subject: Trip Report
Nunivak Is.
23 Aug - 28 Aug.

Sunday, August 23

Departed Nome for Anchorage at 9:00 AM after several days delay due to the eruption of Mt. Spurr. I did not leave Nome Saturday as planned because I would have missed my connecting flight to Bethel by four hours. Opted to stay in Nome and catch the early flight to Anchorage, arriving at about 11:30 AM. Met Bill Hauser and his family at the airport at 4:00 PM. Bill and I departed for Bethel at about 5:30 PM. Arrived Bethel and settled in for an overnight stay at the Delta Cottages.

Monday, August 24

Departed Bethel for Mekoryuk, Nunivak Island at 8:35 AM loaded down with \$80.00 worth of access baggage. Trip to island was uneventful. Ted Moses, General Manager of Bering Sea Reindeer Products gave us a ride from the airport to the village under rainy skies. He also provided Bill and I a comfortable place to stay while in the village. Met our guide Abe David and after some last minute preparations, we loaded up the boat and headed out toward Nash Harbor about 30 miles west of Mekoryuk. The weather did not look all that encouraging as we worked our way toward Nash Harbor. The wind continued to increase from the northwest making the going slow and somewhat rough. After an hour or so, it became evident it would be fool hardy to continue as the seas became more rough. We decided to head for protection in a nearby cove to wait out the wind. After several hours, another attempt was made to continue on, but again we had to abort. We decided to call it a day and head back to Mekoryuk. On our return, the bushing on the prop gave out which required Abe to greatly reduce the boats speed in order for the motor to operate. Rain and windy all night.

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Thursday, August 27

Weather continued to be windy and rainy, with no brake in the forecast. Bill and I had planned to get together with Jude Hensler from BSFA and Dewey Schwalenberg of the Bering Sea Fisheries Development Foundation to discuss various potential fisheries enhancement opportunities in western Alaska. We were able to spend some time talking with Jude about some projects, particularly how to approach enhancement efforts on Nunivak as well as Nelson Island. We also discussed installing a test incubator on the Daparkmiut River in addition to conducting a small (10,000) eggtake to test the feasibility of a project on this river. Later on we had another opportunity to talk with some more locals about run timing, species, and accessibility to area streams, etc. Difficult at times to get a consensus on some of these questions we asked although everyone agreed we were too late for chums! Little by little Bill and I were able to put the pieces together and think we now have a little better handle on the area. However, first hand field investigation by ADF&G personnel is probably warranted and would be money well spent to collect more accurate data.

Friday, August 28

Bill and I packed our gear up and left Mekoryuk at 9:50 AM for Bethel connecting to Anchorage and then for me, on to Nome. I arrived home Friday evening at 6:10 PM to the same windy, rainy weather as Nunivak Island. - End of trip.

Conclusion and Suggestions

- o Based on site evaluations last winter and again just recently of the Daprakmiut River, it may be a acceptable location for placing chum salmon instream incubation boxes. The Daprakmiut River has the advantage of being relatively close to the village of Mekoryuk, a half hour by snowmachine and about one hour by boat to the mouth of the river. However to reach the proposed incubation site during the summer months would require an additional two hour hike from the river mouth. Eggtake would require setting up a camp as close to the incubation site as possible and backpacking the fertilized eggs to the incubation site. Its possible that the Reindeer Herders Association may have a helicopter that might be available to ADF&G. The spring reportedly remains ice-free during the winter (it was when Tom and I were there in February); however the water temperature regime at this

time is unknown. The gradient is sufficient to supply head to instream incubation units. A 90 day temperature recorder was placed in the spring and water samples were collected and forwarded to the FRED Division Limnology Laboratory for analysis. If water temperature data collected through the winter and the water analysis are favorable, a test incubator could be installed and a small eggtake (10,000) undertaken in June/July of 1993.

- o Concurrent with any fisheries enhancement activities planned for the Daparkmiut River in 1993, Nash harbor should still be considered a possible prime candidate for instream incubation. Site evaluation studies planned for this year but not conducted should be rescheduled for June/July of 1993.
- o A water temperature recorder located in the Daparkmiut River area will have to be replaced twice this winter. Arrangements should be made for a local villager to perform this task in the event ADF&G personnel are unable to visit Nunivak Island this winter.
- o Budget consideration will have to be worked out. Additional FY93 trips to Nunivak/Nelson Island were not budgeted for and if required might place other projects and activities in jeopardy. If we are only looking at placing thermographs, perhaps local villagers would serve better and cut cost considerably.
- o From the information obtained from the locals it appears the chum salmon run timing is very close to that of Norton Sound. That being the case, it is going to require that I have two crews working simultaneously, one in the Nome area as well as Nunivak Island. Any work on Nelson Island would in all likelihood require still another crew. These manpower needs will have to be addressed before we commit to any project plans for 1993.

cc Tom Kron
Terry Ellison
Fritz Krause
Dan Albrecht, BSFA
Jude Hensler, BSFA

ALASKA DEPARTMENT OF FISH AND GAME
FISH PATHOLOGY SECTION, CFM&D DIVISION
333 RASPBERRY ROAD, ANCHORAGE, AK 99518-1599

REPORT OF LABORATORY EXAMINATION

LOT (YEAR, STOCK, SPECIES): Wild Daparkmint River chum salmon,
Oncorhynchus keta

FACILITY: ADF&G/CFM&D

CONTACT PERSON/ADDRESS: Pete Velsko, Pouch 1148
Nome, AK 99762

SAMPLE DATE: 07/07/93 DATE SAMPLE RECEIVED: 07/15/93

SPECIMEN TYPE: kidney LIFE STAGE: adult STATE: frozen

NUMBER IN SAMPLE: 8 WILD: yes

HISTORY/SIGNS: NA

REASON FOR SUBMISSION: Broodstock screening

FINAL REPORT DATE: 09/16/93

CLINICAL FINDINGS:

FAT: 0/8 positive for Aeromonas salmonicida
 0/8 positive for Yersinia ruckeri Type I
 0/8 positive for Yersinia ruckeri Type II

ELISA: 0/8 positive for the antigen of Renibacterium
 salmoninarum (Rs). Mean optical density values ≥ 0.095
 were considered positive for the Rs antigen.

VIROLOGY: 0/8 (2 x 4 fish/pools) positive for virus. Tissues
 processed by quantal assay on EPC and CHSE-214 cell lines
 at 14°C for 15 days and blindpassed for an additional 15
 days. Minimum level of detection = 50 infectious
 particles/gm of pooled sample. Cells were pretreated
 with PEG to enhance viral infectivity.

DIAGNOSIS: NA

COMMENTS/RECOMMENDATIONS: No virus or bacterial pathogens were detected in the samples submitted. An additional 52 kidneys and 60 ovarian fluids should be submitted to complete the disease history on this stock.

FISH HEALTH INVESTIGATOR:

^hTammy Burton, Jill Follett, Jana
Geesin, Ted Meyers *W*

TECHNICAL ASSISTANCE: Karen Lipson, Sally Short, Norman Starkey

COPIES TO: FY94, Misc., Burkett, Meyers

ALASKA DEPARTMENT OF FISH AND GAME
FISH PATHOLOGY SECTION, F.R.E.D. DIVISION
333 RASPBERRY ROAD, ANCHORAGE, AK 99518-1599

REPORT OF LABORATORY EXAMINATION

LOT (YEAR, STOCK, SPECIES): Mekoryuk River coho salmon,
Oncorhynchus kisutch

FACILITY: ADF&G/FRED Division

CONTACT PERSON/ADDRESS: Pete Velsko, P.O. Box 1148
Nome, AK 99762-1148

SAMPLE DATE: 08/25/92 DATE SAMPLE RECEIVED: 09/01/92

SPECIMEN TYPE: kidney LIFE STAGE: adult STATE: frozen

NUMBER IN SAMPLE: 1 WILD: yes

HISTORY/SIGNS: NA

REASON FOR SUBMISSION: Disease history development.

FINAL REPORT DATE: 11/12/92

CLINICAL FINDINGS:

FAT: 0/1 positive for Yersinia ruckeri Type I
0/1 positive for Yersinia ruckeri Type II
0/1 positive for Aeromonas salmonicida

ELISA: 0/1 positive for the antigen of Renibacterium salmoninarum (Rs). Average optical density values ≥ 0.095 are considered positive for the Rs antigen.

COMMENTS/RECOMMENDATIONS: No bacterial pathogens were detected in the single kidney sample submitted. Please submit another 59 kidneys and 60 ovarian fluids from this stock to complete the disease history.

FISH HEALTH INVESTIGATOR: T. Burton, J. Follett, T. Meyers

TECHNICAL ASSISTANCE: K. Lipson, S. Short, N. Starkey

COPIES TO: FY93, Misc., Burkett, Meyers, Hauser

ALASKA DEPARTMENT OF FISH AND GAME
FISH PATHOLOGY SECTION, CFM&D DIVISION
333 RASPBERRY ROAD, ANCHORAGE, AK 99518-1599

REPORT OF LABORATORY EXAMINATION

LOT (YEAR, STOCK, SPECIES): Wild Jewoak Creek chum salmon,
Oncorhynchus keta

FACILITY: ADF&G/CFM&D

CONTACT PERSON/ADDRESS: Pete Velsko, Pouch 1148
Nome, AK 99762

SAMPLE DATE: 07/09/93 DATE SAMPLE RECEIVED: 07/15/93

SPECIMEN TYPE: kidney LIFE STAGE: adult STATE: frozen

NUMBER IN SAMPLE: 1 WILD: yes

HISTORY/SIGNS: NA

REASON FOR SUBMISSION: Broodstock screening

FINAL REPORT DATE: 09/16/93

CLINICAL FINDINGS:

FAT: 0/1 positive for Aeromonas salmonicida
 0/1 positive for Yersinia ruckeri Type I
 0/1 positive for Yersinia ruckeri Type II

ELISA: 0/1 positive for the antigen of Renibacterium
 salmoninarum (Rs). Mean optical density values ≥ 0.095
 were considered positive for the Rs antigen.

VIROLOGY: 0/1 positive for virus. Tissues processed by quantal
 assay on EPC and CHSE-214 cell lines at 14°C for 15 days
 and blindpassed for an additional 15 days. Minimum level
 of detection = 50 infectious particles/gm of tissue
 sample. Cells were pretreated with PEG to enhance viral
 infectivity.

DIAGNOSIS: NA

COMMENTS/RECOMMENDATIONS: No virus or bacterial pathogens were detected in the kidney sample submitted. If this stock is to be used as a broodstock, another 59 kidneys and 60 ovarian fluids should be submitted to complete the disease history.

FISH HEALTH INVESTIGATOR:

JB Tammy Burton, *JA* Jill Follett, *JA* Jana Geesin, Ted Meyers

TECHNICAL ASSISTANCE: Karen Lipson, Sally Short, Norman Starkey

COPIES TO: FY94, Misc., Burkett, Meyers

AMS